

Analysis of environmental perception according to political ideology

SUPPLEMENTARY MATERIAL

Table 1.SM. “The most important issue today” (%).

Table 2.SM. “The most important environmental problems” (%).

Figure 1.SM. “Modern life harms the environment” (age groups).

Figure 2.SM. “Willingness to protect the environment” (polynomial estimations).

Figure 3.SM. “Possibility of doing something yourself” (polynomial estimations).

Figure 4.SM. ADI index (ideological spectrums and environmental problems).

Biodiversity and the environment are considered the third most important issue for women, after health and poverty (Table 1.SM). However, this importance only reaches 5.4% globally. The economy is the most important issue for 25% of all respondents.

Table 1.SM shows how women give more importance than men to almost all issues, except immigration. At the top of the list are relevant issues such as the economy, health, and education, which are related to the analysis of corporate responsibility and sustainability highlighted by several authors (Herzig and Moon, 2013).

Women show more interest in issues related to health and education, although the World Economic Forum's annual report on the global gender gap only points to a significant (gender) gap in economic and political dimensions.

We can identify the main environmental problems highlighted by this survey (Table 2.SM): Air pollution (21.7%), climate change (14.7%), and water pollution (12.4%). It is worth noting that women are more concerned about all issues, specifically genetically modified foods, household waste disposal, and water scarcity. This gender-based result is consistent with review of attitudes toward risk by Staveren (2014), although it shows some specific differences (for cultural reasons) at the national level.

However, statistical tests (Levene and t-test) do not reveal any significant differences based on the gender of respondents in both Tables (1.SM and 2.SM).

Supplementary Material

ANALYSIS OF ENVIRONMENTAL PERCEPTION ACCORDING TO POLITICAL IDEOLOGY

Table 1.SM. Percentages of respondents by gender related to “the most important issue today”.

Issue (ranking total)	Male (N = 20,260)	Female (N = 23,804)	Total
	(% in each issue)		(% all issues)
1. Economy	50.94	49.06	24.95
2. Health care	40.08	59.92	22.71
3. Education	46.74	53.26	16.56
4. Poverty	42.75	57.25	11.59
5. Crime	46.13	53.87	11.29
6. Environment	44.72	55.28	5.39
7. Immigration	53.24	46.76	3.79
8. Terrorism	46.92	53.08	2.98
9. None of these	59.04	40.96	0.75
Total	45.98	54.02	100.00

Notes: Two-tailed tests, alpha=0.05. Levene's test for equality of variances (F = 0.36, p-value = 0.55). And t-test for equality of means (t = – 4.25, p-value = 0.67).

Source: ISSP Research Group (2019).

Supplementary Material

ANALYSIS OF ENVIRONMENTAL PERCEPTION ACCORDING TO POLITICAL IDEOLOGY

Table 2.SM. Percentages of respondents by gender related to “the most important environmental problems”.

Environmental problems (ranking)	Male (N = 19,891)	Female (N = 23,189)	Total
	(% in each issue)	(% all issues)	
1. Air pollution	44.78	55.22	21.72
2. Climate change	46.84	53.16	14.72
3. Water pollution	49.75	50.25	12.37
4. Using up our natural resources	47.15	52.85	10.84
5. Chemicals and pesticides	46.63	53.37	10.22
6. Water shortage	44.22	55.78	8.72
7. Domestic waste disposal	43.53	56.47	8.27
8. Nuclear waste	48.93	51.07	6.65
9. Genetically modified foods	40.52	59.48	5.04
10. None of these	53.02	46.98	1.46
Total	46.17	53.83	100.00

Notes: Two-tailed tests, alpha=0.05. Levene's test for equality of variances (F = 0.031, p-value = 0.86). And t-test for equality of means (t = – 0.61, p-value = 0.55).

Source: Our own from ISSP Research Group (2019), question Q7a.

Figure 1.SM shows the age ranges as a percentage of respondents who “strongly agree” or simply ‘agree’ that “modern life damages the environment” (52.7% of total respondents, N = 43,346). A downward trend can be observed as the age range increases, but percentages remain above 50% up to the 55-64 age range. Adulthood (25-65 years) shows a continuous decrease of up to 8 points in the perception of damage to the environment. There is a slight increase in older age groups. There is a difference of almost 10 percentage points between the minimum and maximum values. The linear estimate by ordinary least squares presents a high adjustment ($R^2 = 0.92$). This means that the younger population seems to be more aware of environmental issues.

Figure 2.SM shows willingness to protect the environment by different conservation policies (pay higher prices, pay more taxes, or cuts in the level of life). The second-degree polynomial estimate shows a high fit for the degree of willingness (from high to low), with the respective R^2 values for prices (**P**), taxes (**T**), and lifestyle cuts (**SL**) being 75.28%, 93.08%, and 75.32%.

While Figure 3.SM, the second-degree polynomial estimate shows a low and a high fit for “the possibility of doing something to protect the environment” (*too difficult* and *possible*, respectively), with respective R^2 values of 47% and 75%.

R^2 values express the level of fit of each estimated model given the observations represented in the graphs (with respect to various ISSP items on environmental perception).

Figure 4.SM shows the ADI index (Agreement/Disagreement Index) in both ideological spectrums (left and right) about several environmental problems (ranking by majority agree/disagree).

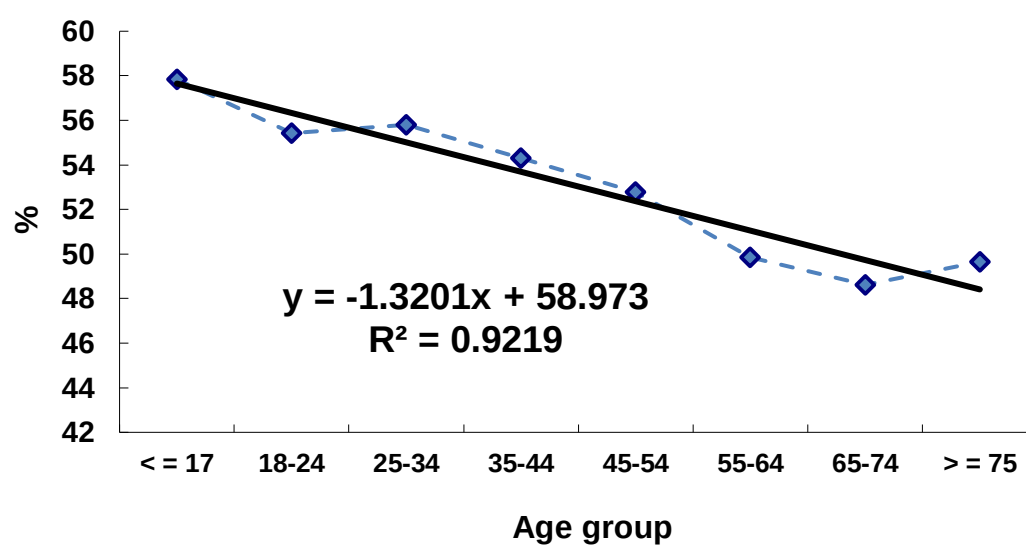


Fig. 1.SM. Evolution per age group of the percentage of opinions which clearly states that “modern life harms the environment” (N = 22,833).

Source: Our own from ISSP Research Group (2019).

Supplementary Material

ANALYSIS OF ENVIRONMENTAL PERCEPTION ACCORDING TO POLITICAL IDEOLOGY

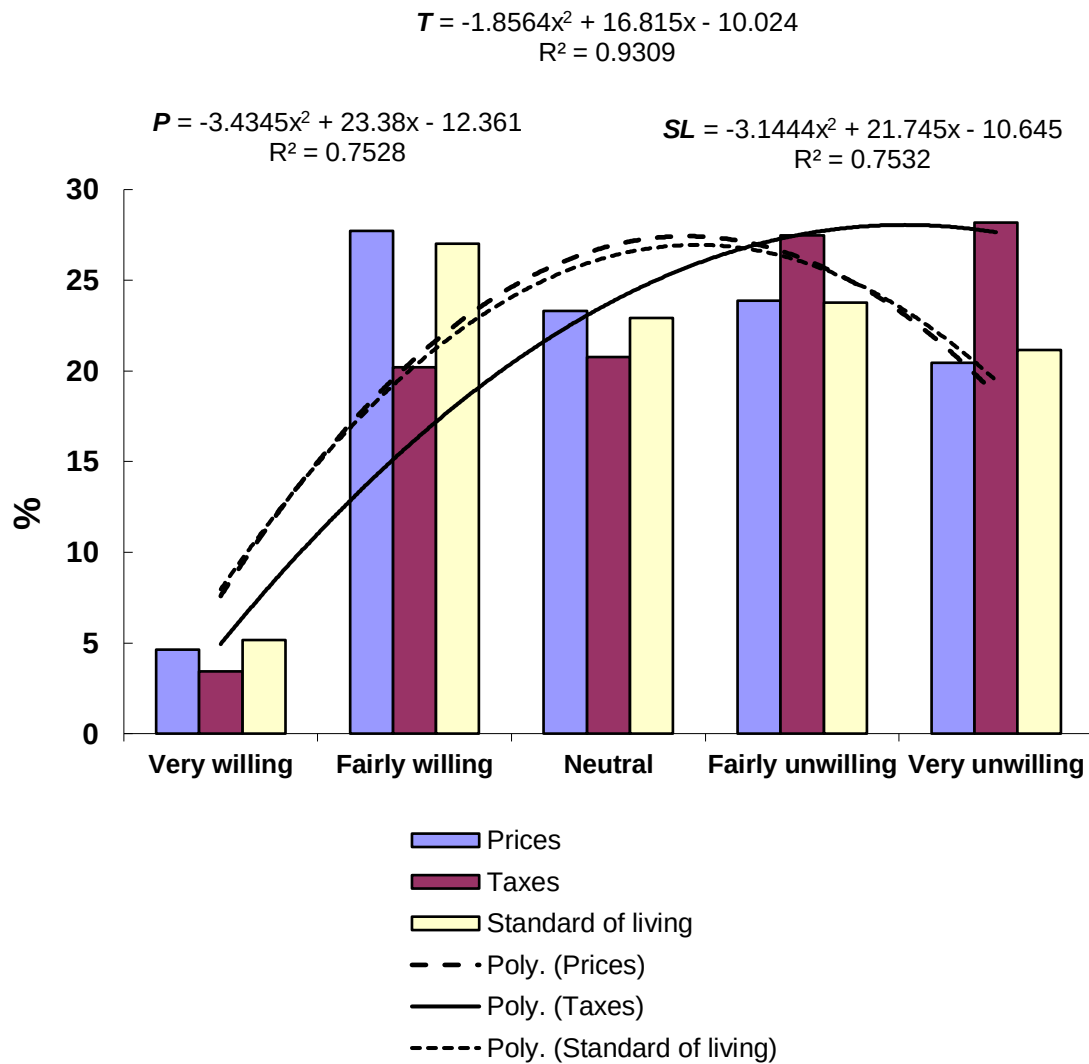


Fig. 2.SM. Willingness to protect the environment in accordance with various conservation policies.

Note: Missing data are excluded. To protect the environment is willing to pay higher prices (**P**: "Prices"), willing to pay more taxes (**T**: "Taxes"), or willing to reductions in the level of life (**SL**: "Standard of living"). Sample respectively: 43,635, 43,594 and 43,526. Polynomial estimations ("prices": dotted line, "taxes": solid line, and "standard of living": dashed line). R^2 values for prices, taxes, and lifestyle cuts (standard of living): 75.28%, 93.08%, and 75.32%.

Source: Our own from ISSP Research Group (2019).

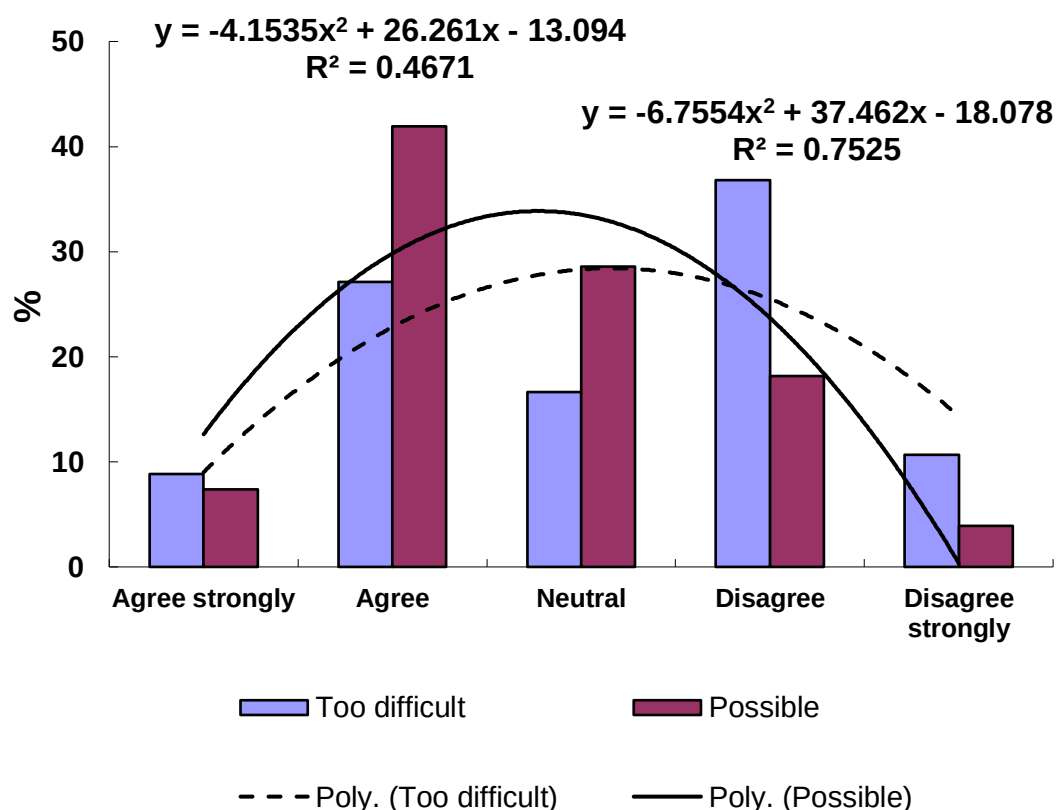


Fig. 3.SM. Possibility of doing something yourself to help protect the environment.

Note: Missing data are excluded. “Too difficult” means “It’s too hard to make something yourself to protect nature”. “Possible” means “I do my best even if it costs money/time”. Polynomial estimations (“too difficult”: dotted line and “possible”: solid line). Sample: 44,186 and 43,669 respondents respectively. R² values: 47% and 75%.

Source: Our own from ISSP Research Group (2019).

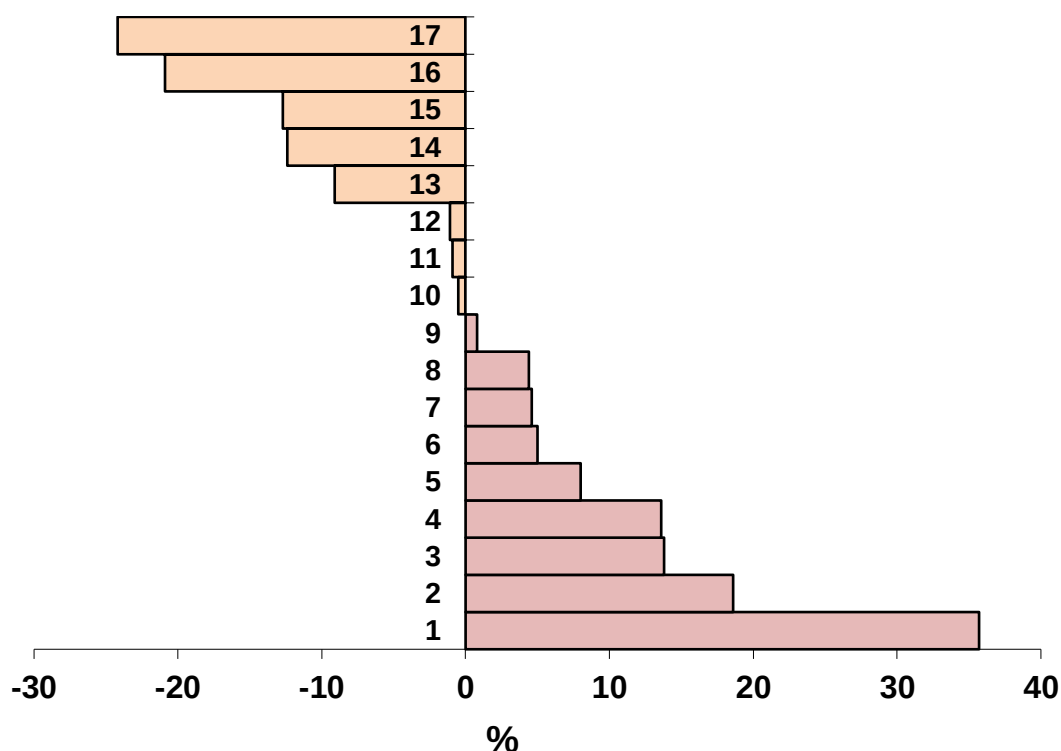


Figure 4.SM. Agreement/Disagreement Index in both ideological spectrums (left and right) about several environmental problems (ranking by majority agree/disagree).

Note: Positive/negative percentages in the X axis are the excess of agree/disagree opinions.

Vertical axis (Y): See legend of letters 1st to 17th (rank) in Table 5 and also here:

Ranking of Agree opinions (1st to 9th):

- 1st. k) Lack of international agreements.
- 2nd. e) Air pollution caused by industry.
- 3rd. g) Pollution river, lake.
- 4th. d) Pesticides and chemicals used in farming.
- 5th. f) A rise in world's temperature caused by climate change.
- 6th. a) Confidence in private enterprises.
- 7th. l) Don't protect by economic growth.

8th. c) Nuclear power stations.

9th. i) Modifying the genes of certain crops.

Ranking of Disagree opinions (10th to 17th):

10th. b) Air pollution caused by cars.

11th. j) Modern life.

12th. q) Don't reduce the energy or fuel at home.

13th. o) Don't buy fruit and vegetables without pesticides or chemicals.

14th. m) Don't avoid buying certain products.

15th. h) Poorer countries don't make more effort.

16th. p) Economic growth.

17th. n) Don't cut back on driving a car.

Source: Our own from ISSP Research Group (2019).

Data availability

ISSP Research Group, 2019. Module Topic: Environment III. Data file v. 3.0.0, 2019-06-13. GESIS Data Archive. <https://doi.org/10.4232/1.13271>

References

- Herzig, C., Moon, J. (2013). Discourses on corporate social ir/responsibility in the financial sector. *Journal of Business Research*, 66 (10), 1870–1880. <https://doi.org/10.1016/j.jbusres.2013.02.008>
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- Staveren, I. (2014). The Lehman Sisters hypothesis. *Cambridge Journal of Economics*, 38 (5), 995–1014. <https://doi.org/10.1093/cje/beu010>